What is claimed is:

1. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; and a framework fashioned to support and integrate elements of said invention into a single structure and a mounting and arrangement of said elements of said invention on said framework such that the force of wind acting on the elements or on the framework causes the framework and elements to orient appropriately into the oncoming wind.

2. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; and one or more flow regulator valves used to prevent or reduce a reverse flow of air into, rather than out of one or more said vacuum outlets that may otherwise occur under turbulent conditions of said wind flow, or to manage, limit or otherwise control the flow of air outwards from the said vacuum outlets and into the said regions of vacuum.

3. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; and having a venturi design that includes one or more secondary airflow accelerators formed around one or more said vacuum outlets and having aerodynamic surfaces such that said wind flowing around said aerodynamic surfaces of said secondary airflow accelerators will be accelerated to a lesser degree than that of said wind flowing around the aerodynamic surfaces of an adjacent said vacuum generator, the two forming a venturi spacing through which said wind flows.

4. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; a framework fashioned to support and integrate elements of said invention into a single structure and a mounting and arrangement of said elements of said invention on said framework such that the force of wind acting on the elements or on the framework causes the framework and elements to orient appropriately into the oncoming wind; and one or more

flow regulator valves used to prevent or reduce a reverse flow of air into, rather than out of one or more said vacuum outlets that may otherwise occur under turbulent conditions of said wind flow, or to manage, limit or otherwise control the flow of air outwards from the said vacuum outlets and into the said regions of vacuum.

5. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; and a framework fashioned to support and integrate elements of said invention into a single structure and a mounting and arrangement of said elements of said invention on said framework such that the force of wind acting on the elements or on the framework causes the framework and elements to orient appropriately into the oncoming wind; and having a venturi design that includes one or more secondary airflow accelerators formed around one or more said vacuum outlets and having aerodynamic surfaces such that said wind flowing around said aerodynamic surfaces of said secondary airflow accelerators will be accelerated to a lesser degree than that of said wind flowing around the aerodynamic surfaces of an adjacent said vacuum generator, the two forming a venturi spacing through which said wind flows.

6. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn

into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; one or more flow regulator valves used to prevent or reduce a reverse flow of air into, rather than out of one or more said vacuum outlets that may otherwise occur under turbulent conditions of said wind flow, or to manage, limit or otherwise control the flow of air outwards from the said vacuum outlets and into the said regions of vacuum; and having a venturi design that includes one or more secondary airflow accelerators formed around one or more said vacuum outlets and having aerodynamic surfaces such that said wind flowing around said aerodynamic surfaces of said secondary airflow accelerators will be accelerated to a lesser degree than that of said wind flowing around the aerodynamic surfaces of an adjacent said vacuum generator, the two forming a venturi spacing through which said wind flows.

7. A vacuum driven wind energy conversion invention comprising one or more vacuum generators, said vacuum generators having aerodynamic surfaces for accelerating the flow of wind and thereby inducing regions of vacuum; one or more vacuum outlets located in proximity to the said regions of vacuum that provide a source of air to be drawn into said regions of vacuum; one or more energy converters to convert the force of said air drawn into the said regions of vacuum into usable electrical or mechanical energy; one or more intake collectors to supply a source of said air or ram air to the said energy converters; one or more vacuum channels for supplying said air to said one or more vacuum outlets and to said one or more regions of vacuum, and for conveying said air from said energy converters; a framework fashioned to support and integrate elements of said invention into a single structure and a mounting and arrangement of said elements of said invention on said framework such that the force of wind acting on the elements or on the framework causes the framework and elements to orient appropriately into the oncoming wind; one or more

flow regulator valves used to prevent or reduce a reverse flow of air into, rather than out of one or more said vacuum outlets that may otherwise occur under turbulent conditions of said wind flow, or to manage, limit or otherwise control the flow of air outwards from the said vacuum outlets and into the said regions of vacuum; and having a venturi design that includes one or more secondary airflow accelerators formed around one or more said vacuum outlets and having aerodynamic surfaces such that said wind flowing around said aerodynamic surfaces of said secondary airflow accelerators will be accelerated to a lesser degree than that of said wind flowing around the aerodynamic surfaces of an adjacent said vacuum generator, the two forming a venturi spacing through which said wind flows.

8. A method for using wind energy, comprising:

providing a number of components including at least a first vacuum generator that accelerates wind passing over aerodynamic surfaces of said first vacuum generator and induces one or more regions of vacuum and at least a first vacuum outlet positioned in proximity to said one or more regions of vacuum which acts as an outlet and source of air to be drawn into said one or more regions of vacuum;

reducing reverse flow of air into, rather than out of, said at least first vacuum outlet; and

converting airflow drawn into said one or more regions of vacuum into usable electrical or mechanical energy using an energy converter.

9. The method of Claim 8 further comprising receiving ram air into said energy converter using at least a first intake collector.

10. The method of Claim 8 wherein said number of components are combined by a framework that supports and integrates said components into a single structure and in which said components are mounted and arranged such that the force of the wind causes said framework and said components to orient into the wind.

11. The method of Claim 8 further comprising accelerating secondary airflow using at least a first secondary airflow accelerator associated with said first vacuum outlet and in which said first secondary airflow accelerator accelerates wind to a lesser degree than wind flowing around said aerodynamic surfaces of said first vacuum generator.

12. The method of Claim 8 wherein said reducing is conducted using one or more flow regulator valves.

13. A method for using wind energy, comprising:

providing a number of components including at least a first vacuum generator that accelerates wind passing over aerodynamic surfaces of said first vacuum generator and that induces one or more regions of vacuum and at least a first vacuum outlet positioned in proximity to said one or more regions of vacuum that acts as an outlet and a source of air to be drawn into said one or more regions of vacuum;

accelerating secondary airflow using at least a first secondary airflow accelerator associated with said first vacuum outlet and in which wind flowing around said secondary airflow accelerator is accelerated to a lesser degree than that of wind flowing around said aerodynamic surfaces of said first vacuum generator; and

converting airflow drawn into said one or more regions of vacuum into usable electrical or mechanical energy.